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(54) **OFFLOADING VIRTUAL MACHINE FLOWS TO PHYSICAL QUEUES**

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(57) **ABSTRACT**

The present invention extends to methods, systems, and computer program products for offloading virtual machine flows to physical queues. A computer system executes one or more virtual machines, and programs a physical network device with one or more rules that manage network traffic for the virtual machines. The computer system also programs the network device to manage network traffic using the rules. In particular, the network device is programmed to determine availability of one or more physical queues at the network device that are usable for processing network flows for the virtual machines. The network device is also programmed to identify network flows for the virtual machines, including identifying characteristics of each network flow. The network device is also programmed to, based on the characteristics of the network flows and based on the rules, assign one or more of the network flows to at least one of the physical queues.